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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/760,273

01/21/2004

Kia Silverbrook

MPA02US

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24011

7590

08/08/2006

SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, NSW 2041
AUSTRALIA

EXAMINER

LEBRON, JANNELLE M

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/760,273	Applicant(s) SILVERBROOK ET AL.	
	Examiner Jannelle M. Lebron	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1-4 and 6-11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2 and 4-12 of U.S. Patent No. 7,083,271. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following:

<u>Instant application: 10/760,273</u>	<u>US Patent: 7,083,271</u>
1. A printhead module for a printhead assembly, comprising at least two printhead integrated circuits, each of which has nozzles formed therein for delivering printing fluid onto the surface	A printhead module for a printhead assembly, comprising at least two printhead integrated circuits, each of which has nozzles formed therein for delivering printing fluid onto the surface

<p>of print media, and an elongate support member adhesively supporting the printhead integrated circuits via individual fluid distribution members for each printhead integrated circuit,</p> <p>wherein the support member has a plurality of longitudinally extending channels for carrying different printing fluids for the printhead integrated circuits,</p> <p>the support member is selectable to meet specific requirements as to the number of said printing fluids to be employed for printing, and</p> <p>each of the fluid distribution members incorporates a laminated stack of layers, each layer having apertures for distributing the printing fluid from the support member to the associated printhead integrated circuit, the apertures of each layer from the support member to the associated printhead integrated circuit being of successively smaller diameter.</p> <p>2. A printhead module wherein: the support member, the fluid distribution members and the at least two printhead integrated circuits are formed as a unitary arrangement with an electrical connector for connecting electrical signals to the at least two printhead integrated circuits; and</p> <p>the support member includes a plurality of apertures extending through a wall of the support member arranged so as to</p>	<p>of print media, a support member supporting the printhead integrated circuits and at least two fluid distribution members individually mounting a respective one of the at least two printhead integrated circuits to the support member (claim 1, lines 1-5),</p> <p>wherein the support member has at least one longitudinally extending channel for carrying the printing fluid for the printhead integrated circuits (claim 1, lines 6-7),</p> <p>(It would have been obvious to one in ordinary skill in the art to select a support member in which the number of channels equal the quantity of printing fluids to be used in order for the printhead assembly to work properly).</p> <p>each of the fluid distribution members is formed as a laminated stack of layers for directing the printing fluid from the apertures of the support member to the nozzles of the associated printhead integrated circuit, each successive layer of the stack from the support member to the nozzles having distribution apertures of successively smaller diameter (claim 1, lines 9-12).</p> <p>A printhead module wherein the at least two printhead integrated circuits, the support member and the at least two fluid distribution members are formed as a unitary arrangement with an electrical connector for connecting electrical signals to the at least two printhead integrated circuits (claim 2); and</p> <p>the support member [...] includes a plurality of apertures extending from the at least one channel through a wall of the</p>
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<p>direct the printing fluid from the plurality of channels to associated nozzles in both, or if more than two, all of the printhead integrated circuits for printing by way of respective ones of the fluid distribution members.</p>	<p>support member (claim 1, lines 7-8) arranged to carry a different printing fluid to associated groups of the nozzles in the both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members (claim 7).</p>
<p>3. A printhead module wherein the printhead module is arranged to be removably mounted to the printhead assembly.</p>	<p>A printhead module wherein the printhead module is arranged to be removably mounted to the printhead assembly (claim 6).</p>
<p>4. A printhead module wherein the support member is formed with a further channel for delivering air to the at least two printhead integrated circuits for maintaining the nozzles of the at least two printhead integrated circuits substantially free from impurities.</p>	<p>A printhead module wherein the support member is formed with a further channel for delivering air to the at least two printhead integrated circuits for maintaining the nozzles of the at least two printhead integrated circuits substantially free from impurities (claim 8).</p>
<p>6. A printhead module wherein: the laminated stack comprises at least three layers comprising an upper layer upon which the associated printhead integrated circuit is mounted, a middle layer and a lower layer which is attached to an upper surface of the support member; the lower layer includes first distribution apertures arranged to align with respective ones of the apertures in the support member and first distribution channels in an upper surface thereof associated with respective ones of the first distribution apertures, the first distribution apertures having substantially the same diameter as the apertures in the support member; the middle layer includes second distribution apertures arranged to align with the first distribution channels of the lower layer, the second distribution</p>	<p>A printhead module wherein: the laminated stack comprises at least three layers comprising an upper layer upon which the associated printhead integrated circuit is mounted, a middle layer and a lower layer which is attached to an upper surface of the support member; the lower layer includes first distribution apertures arranged to align with respective ones of the apertures in the support member and first distribution channels in an upper surface thereof associated with respective ones of the first distribution apertures, the first distribution apertures having substantially the same diameter as the apertures in the support member; the middle layer includes second distribution apertures arranged to align with the first distribution channels of the lower layer, the second distribution</p>

apertures having a smaller diameter than the first distribution apertures;

the upper layer includes second distribution channels in a lower surface thereof arranged to align with the second distribution apertures of the middle layer and third distribution apertures associated with the second distribution channels, the third distribution apertures having a smaller diameter than the second distribution apertures; and

the associated printhead integrated circuit includes nozzle supply apertures arranged to align with the third distribution apertures of the upper layer and to direct fluid to respective ones of the nozzles, the nozzle supply apertures having substantially the same diameter as the third distribution apertures.

7. A printhead module wherein the apertures of the support member have a diameter of the order of millimeters and the nozzle supply apertures of the at least two printhead integrated circuits have a diameter of the order of micrometers.

8. A printhead wherein a lower surface of each fluid distribution member is attached to the upper surface of the support member by an adhesive material.

9. A printhead module wherein the adhesive material is deposited to form a gasket which surrounds each of the apertures of the support member and each of corresponding apertures formed in the lower surface of the fluid distribution member so as to form a seal between the respective apertures.

apertures having a smaller diameter than the first distribution apertures;

the upper layer includes second distribution channels in a lower surface thereof arranged to align with the second distribution apertures of the middle layer and third distribution apertures associated with the second distribution channels, the third distribution apertures having a smaller diameter than the second distribution apertures; and

the associated printhead integrated circuit includes nozzle supply apertures arranged to align with the third distribution apertures of the upper layer and to direct fluid to respective ones of the nozzles, the nozzle supply apertures having substantially the same diameter as the third distribution apertures (claim 4).

A printhead module wherein the apertures of the support member have a diameter of the order of millimeters and the nozzle supply apertures of the at least two printhead integrated circuits have a diameter of the order of micrometers (claim 5).

A printhead module wherein lower surfaces of each fluid distribution members are attached to the upper surface of the support member by an adhesive material (claim 9).

A printhead module wherein the adhesive material is deposited to form a gasket which surrounds each of the apertures of the support member and each of corresponding apertures formed in the lower surface of the fluid distribution member so as to form a seal between the respective apertures (claim 10).

<p>10. A printhead module wherein: the apertures of the support member are formed in a row extending across the support member with respect to the longitudinally extending direction of the support member; and two deposits of the adhesive material are deposited on either side of the row of apertures to provide stability for the mounting arrangement.</p> <p>11. A printhead module wherein the adhesive material is a curable resin.</p>	<p>A printhead module wherein: the apertures of the support member are formed in a row extending across the support member with respect to the longitudinally extending direction of the support member; and two deposits of the adhesive material are deposited on either side of the row of apertures to provide stability for the mounting arrangement (claim 11).</p> <p>A printhead module wherein the adhesive material is a curable resin (claim 12).</p>
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Communication with the USPTO

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jannelle M. Lebron whose telephone number is (571) 272-2729. The examiner can normally be reached on Monday thru Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vip Patel can be reached on (571) 272-2458. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2861

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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